**Mongo DB Queries**

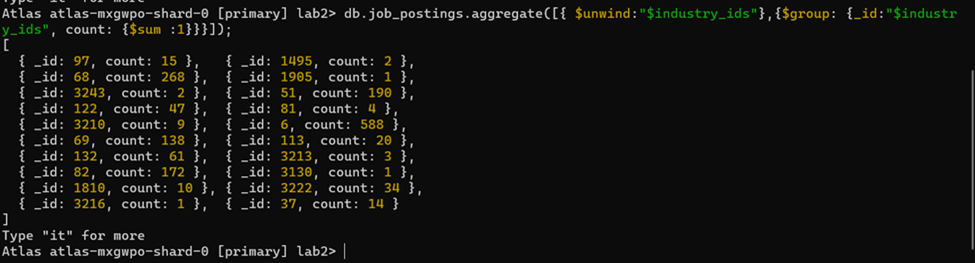
1. **Count of job postings by job industry.**

db.job\_postings.aggregate([

{ $unwind: "$industry\_ids" },

{ $group: { \_id: "$industry\_ids", count: { $sum: 1 } } }

])



1. **Job postings with a salary range**

db.job\_postings.find(

{"salary\_details.min\_salary" {$gte:30000},

"salary\_details.max\_salary":{$lte:100000}},

{job\_id:1,"salary\_details.min\_salary":1,

"salary\_details.max\_salary":1}

);



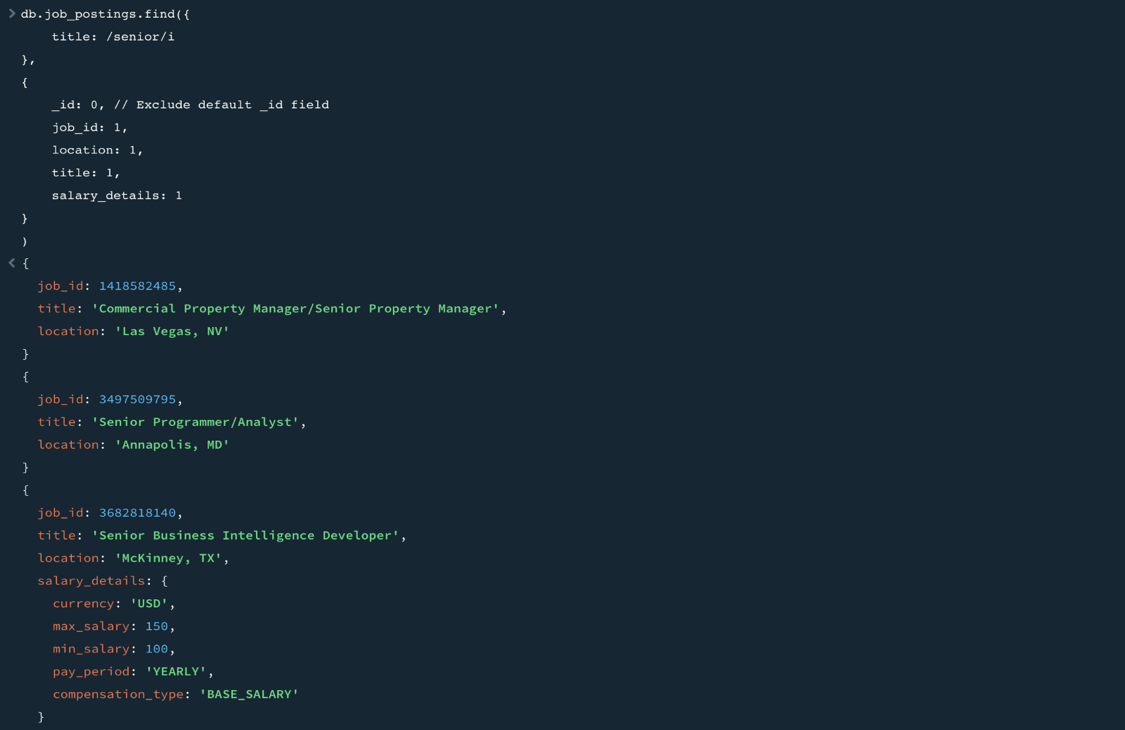
1. **Query to find all the posting having ‘senior’ position job\_postings with details of job location and salary.**

db.job\_postings.find(

{ title: /senior/i },

{ \_id: 0, job\_id: 1, location: 1, title: 1, salary\_details: 1 }

)









1. **Top 3 job\_postings with highest number of views.**

db.job\_postings.aggregate([

{ $sort: { views: -1 } },

{ $limit: 3 },

{

$project: {

job\_id: 1,

title: 1,

views: 1,

work\_type: 1,

location: 1,

expiry: 1,

application\_type: 1,

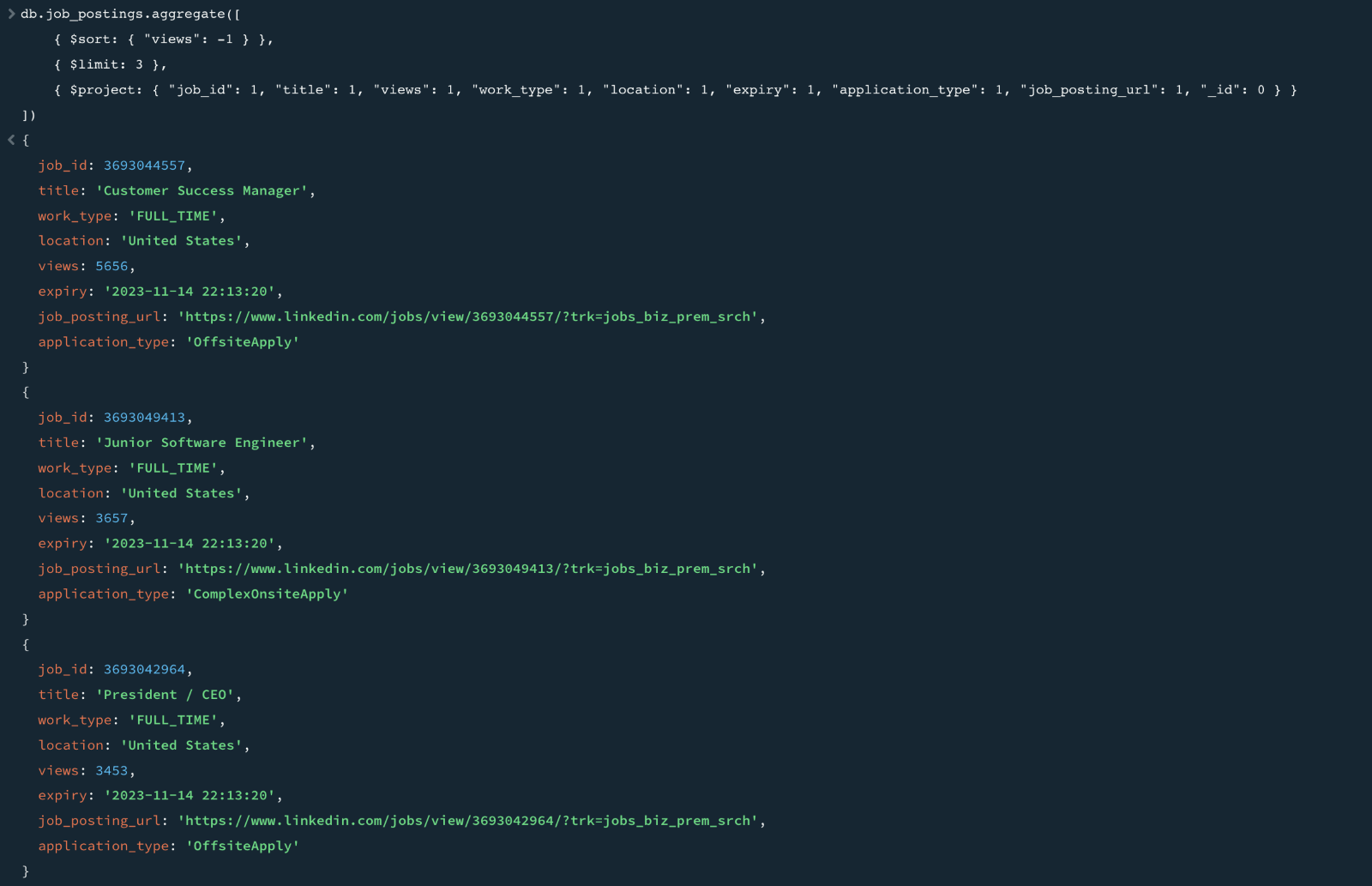
job\_posting\_url: 1,

\_id: 0

}

}

])



1. **Locations with the Highest Number of Remote Work Opportunities**

db.job\_postings.aggregate([

{ $match: { remote\_allowed: 1 } },

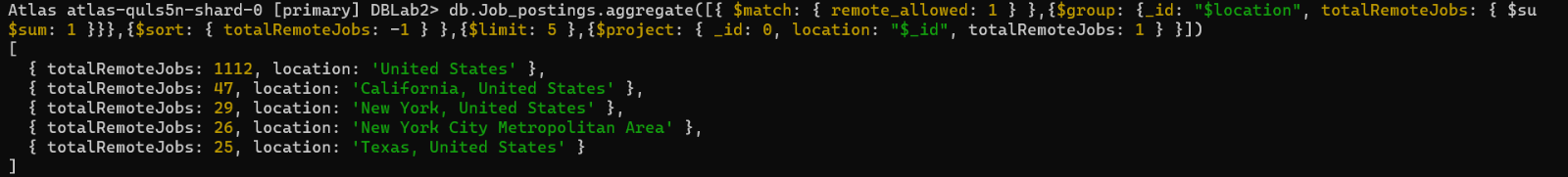
{ $group: { \_id: "$location", totalRemoteJobs: { $sum: 1 } } },

{ $sort: { totalRemoteJobs: -1 } },

{ $limit: 5 },

{ $project: { \_id: 0, location: "$\_id", totalRemoteJobs: 1 } }

])



1. **Top 5 Locations with the Sponsored Job Postings**

db.job\_postings.aggregate([

{ $match: { sponsored: 1 } },

{ $group: { \_id: "$location", total\_sponsored\_jobs: { $sum: 1 } } },

{ $sort: { total\_sponsored\_jobs: -1 } },

{ $limit: 5 },

{ $project: { \_id: 0, location: "$\_id", total\_sponsored\_jobs: 1 } }

])

A black screen with yellow and white text

Description automatically generated

1. **Company with highest employee count where specialities is “analytics”.**

db.companies.aggregate([

{ $match: { specialities: "analytics" } },

{ $sort: { employee\_counts: -1 } },

{ $limit: 1 },

{

$project: {

\_id: 0,

company\_name: "$name",

company\_size: "$company\_size",

employeeCount: "$employee\_counts"

}

}

])

A black screen with white text

Description automatically generated

1. **Find top 10 company industries having highest job postings.**

db.getCollection("job\_postings").aggregate([

{

$lookup: {

from: "companies",

localField: "company\_id",

foreignField: "company\_id",

as: "CompanyDetails"

}

},

{ $unwind: { path: "$CompanyDetails" } },

{ $unwind: { path: "$CompanyDetails.industries" } },

{ $group: { \_id: "$CompanyDetails.industries", countInd: { $sum: 1 } } },

{ $sort: { countInd: -1 } },

{ $limit: 10 }

])

A screenshot of a computer

Description automatically generated

1. **Finding the top 3 companies possessing maximum employee\_counts.**

db.companies.aggregate([

{ $unwind: "$employee\_counts" },

{ $sort: { "employee\_counts.employee\_count": -1 } },

{

$group: {

\_id: "$name",

maxEmployeeCount: { $max: "$employee\_counts.employee\_count" }

}

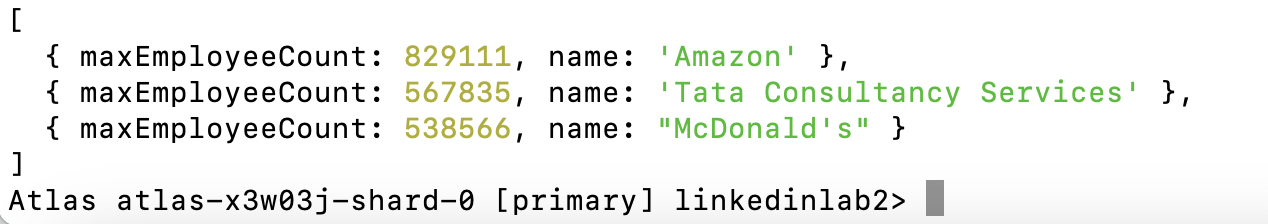
},

{ $sort: { maxEmployeeCount: -1 } },

{ $limit: 3 },

{ $project: { \_id: 0, name: "$\_id", maxEmployeeCount: 1 } }

])



1. **Finding the top 20 specialities and sorted based on the maximum count of specialities.**

db.companies.aggregate([

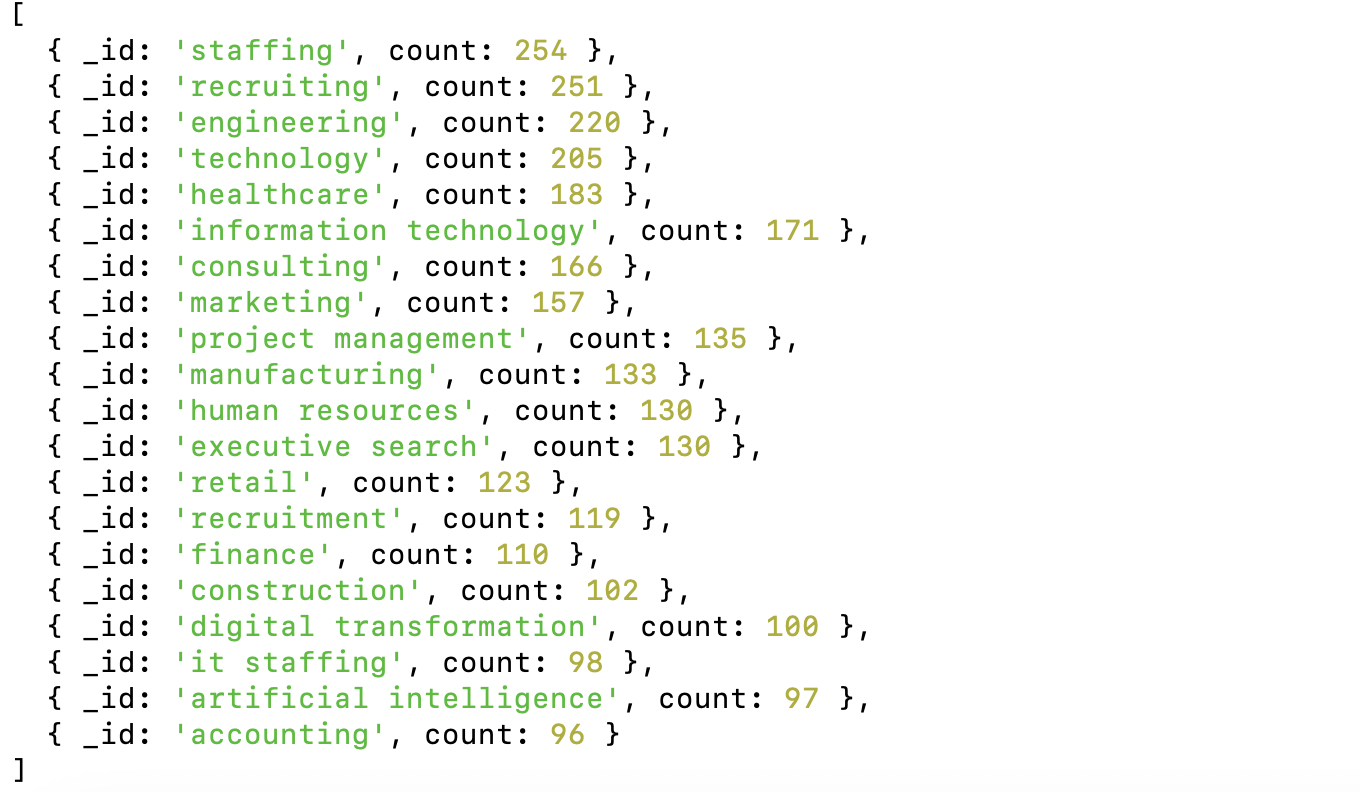
{ $unwind: "$specialities" },

{ $group: { \_id: "$specialities", count: { $sum: 1 } } },

{ $sort: { count: -1 } },

{ $limit: 20 }

])



1. **Finding the companies that are offering FULL\_TIME positions as remote opportunities along with the company\_name, title.**

db.job\_postings.aggregate([

{ $match:

{ "work\_type": "FULL\_TIME",

"remote\_allowed": 1 },

{ $lookup:

{ from: "companies",

localField: "company\_id",

foreignField: "company\_id", as: "company"} },

{ $unwind: "$company" },

{ $project:

{\_id: 0,

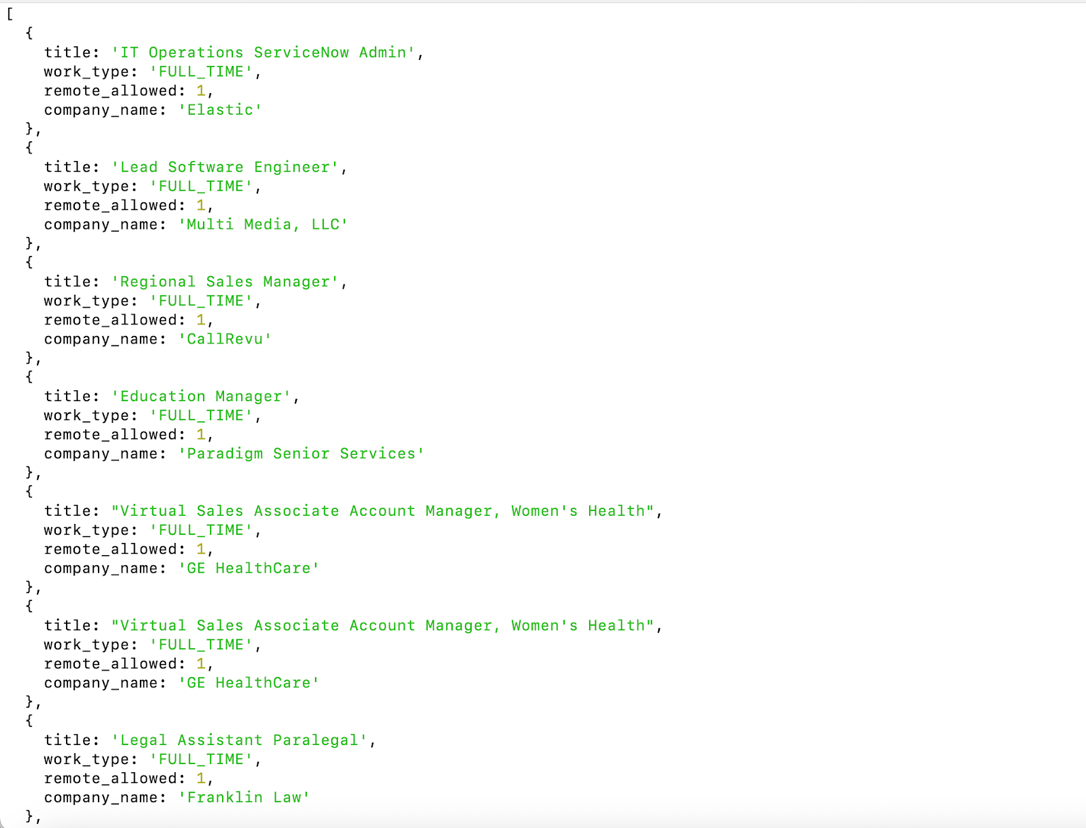
title: 1,

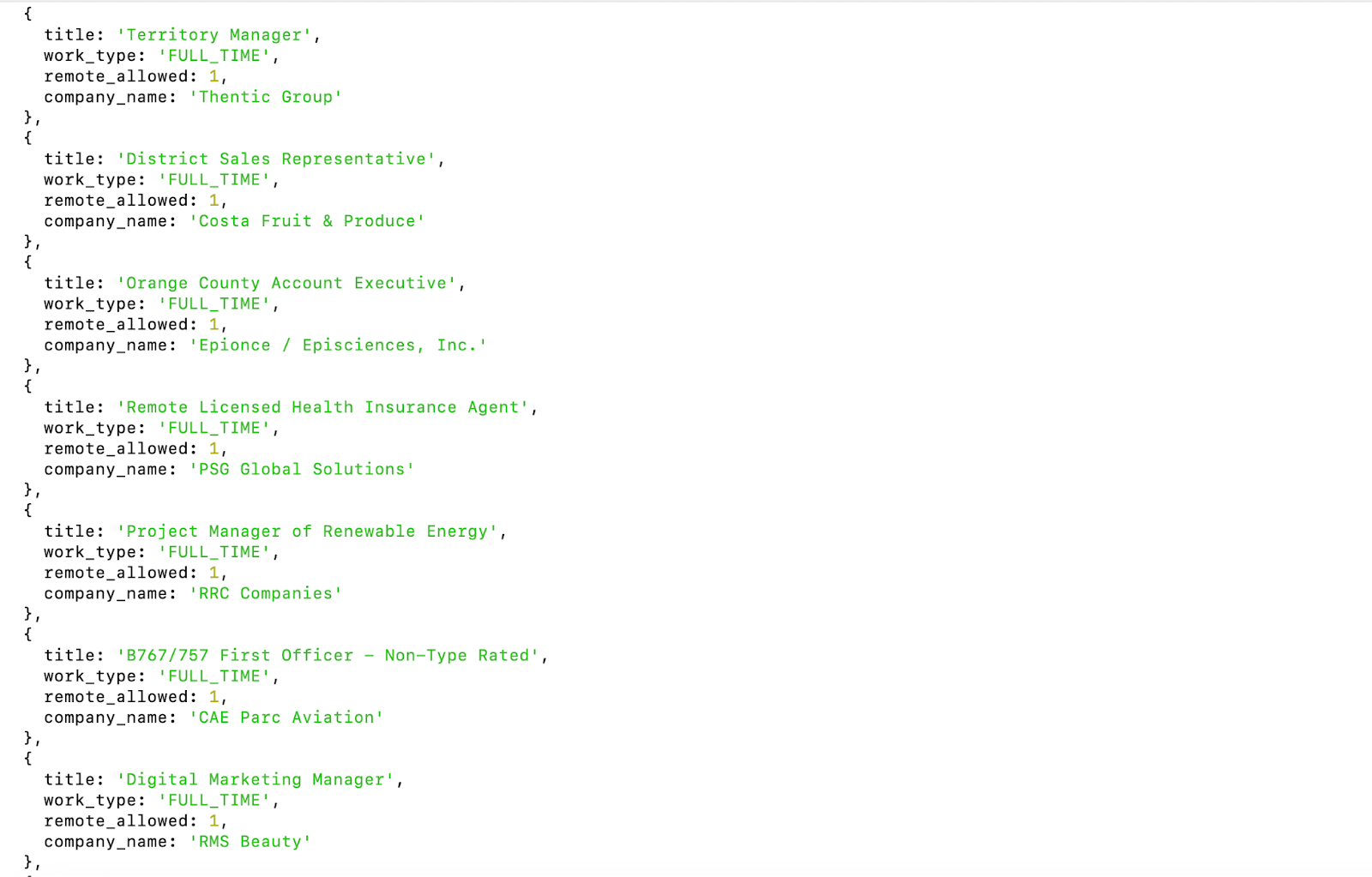
work\_type: 1,

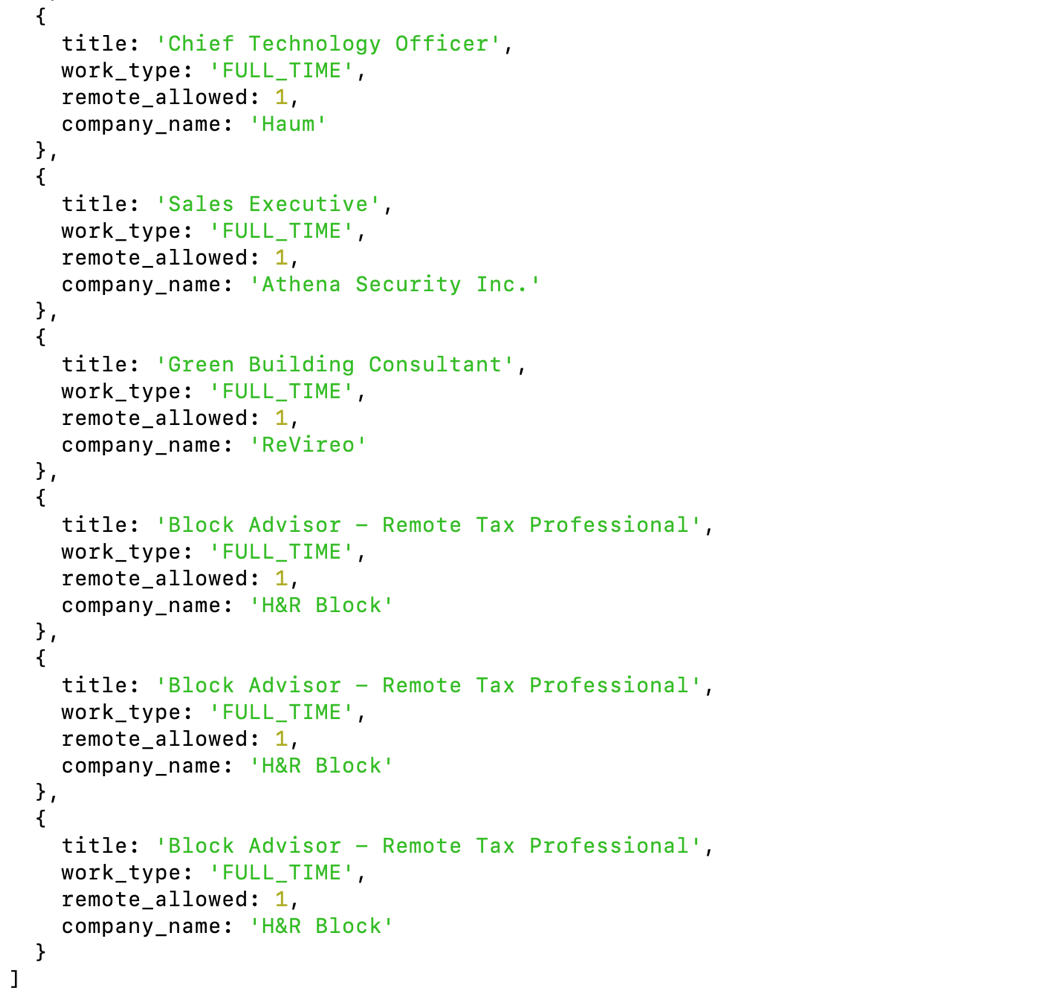
remote\_allowed: 1,

company\_name: "$company.name" } }

]);







**12**. **Count of companies for the respective specialties: internet of things, cloud, iot, ai, network.**

db.companies.aggregate([

{ $match: { specialities: "internet of things" } },

{ $group: { \_id: null, count: { $sum: 1 } } }

]);

db.companies.aggregate([

{ $match: { specialities: "cloud" } },

{ $group: { \_id: null, count: { $sum: 1 } } }

]);

db.companies.aggregate([

{ $match: { specialities: "iot" } },

{ $group: { \_id: null, count: { $sum: 1 } } }

]);

db.companies.aggregate([

{ $match: { specialities: "ai" } },

{ $group: { \_id: null, count: { $sum: 1 } } }

]);

db.companies.aggregate([

{ $match: { specialities: "network" } },

{ $group: { \_id: null, count: { $sum: 1 } } }

]);

